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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/825,558

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Michael Fleisher

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EXAMINER

BARKER, MATTHEW M

ART UNIT

PAPER NUMBER

3662

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/825,558	<b>Applicant(s)</b> FLEISHER ET AL.	
	<b>Examiner</b> Matthew M. Barker	<b>Art Unit</b> 3662	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-44 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 and 29-44 is/are rejected.
- 7) ☒ Claim(s) 19 and 28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/14/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 20 (page 5, line 20), 67 (page 9, line 1), 22' (page 8, line 6). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claim 19 is objected to because of the following informalities: The claim is missing a period. Appropriate correction is required.

### ***Double Patenting***

3. Applicant is advised that should claim 12 be found allowable, claim 16 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both

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cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim.

See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 112***

4. Claims 20-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites the limitation "in which replacing at least a second portion of the first image data" in lines 1-2. There is insufficient antecedent basis for this "replacing" in the claim. It is unclear if "replacing" in claim 20 refers to the same "replacing a portion of the first image data with second image data" of parent claim 19. Claims 21-23 are also rejected because they depend on claim 20.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 12-17, 24-27, 29-30, 32-34, 37-39, and 41-42 rejected under 35 U.S.C. 103(a) as being unpatentable over Lovberg et al. (2004/0080448).

Regarding claim 1, Lovberg discloses the claimed method of interrogating a subject, including a person, with electromagnetic radiation in the range of about

100MHz to about 2 THz (abstract, Figure 3B); generating first image data representative of at least a portion of the person to produce an image with a given resolution; modifying at least a portion of the first image data in a first manner by blurring a corresponding portion of the first image (paragraph 0038, lines 1-3); and displaying the modified image (paragraph 0037, lines 13-17).

Lovberg does not specify that the blurring is accomplished by reducing the resolution of the image, however it is well known that reducing resolution of an image is one way of blurring, therefore it would have been obvious to use resolution reduction in order to blur a portion of the image.

Regarding claim 2, Lovberg does not specify that the blurring includes reducing the number of different levels of intensity; however, blurring reduces the detail visible in an image, and as one method of blurring, reducing the number of intensity levels would have been obvious in order to hide detail of private areas of the subject.

Regarding claim 3, using only two levels of intensity in the blurring of Lovberg would have been obvious in order to further reduce visible detail and to simplify the image processing required.

Regarding claim 32, Lovberg discloses the claimed means for interrogating (50), means for generating first image data (50), inherent means for modifying (paragraph 0038, lines 1-3), and means for displaying (Monitor, Figure 4).

Lovberg does not specify that the blurring is accomplished by reducing the resolution of the image, however it is well known that reducing resolution of an image is

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one way of blurring, therefore it would have been obvious to use resolution reduction in order to blur a portion of the image.

Regarding claims 37-39, the claimed program of commands is inherent to carry out the method as discussed regarding claims 1-3 above.

Regarding claims 12-16, 36 and 41, the claims describe the creation of a monochromatic image from the image data. It is unclear if Lovberg teaches producing a monochromatic image, however even if Lovberg does not, producing monochromatic images from image data is well known and it would have been obvious to do so in the system of Lovberg in order to hide detail of private areas of the person being scanned (see paragraphs 0037-0038).

Regarding claims 17 and 42, Lovberg discloses identifying a second portion of the first image data having characteristics corresponding to characteristics of an object carried by the person, and displaying with the modified image, an image representative of the second portion of the first image data (paragraph 0038).

Regarding claim 24, Lovberg discloses providing the claimed visual distinction by placing a logo on the image at the position of the first image data not corresponding to a portion of the person.

Regarding claims 25-26, increasing and decreasing levels of intensity of picture elements is inherent to the placing of an appropriate logo on the image as discussed regarding claim 24 above.

Regarding claim 27, determining a shape corresponding to the shape of at least a portion of the person is a common operation of imaging systems; it would have been

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obvious to determine a shape of a portion of the person in the processing of Lovberg in order to allow the system operator to determine where on the person's body a potential threat exists.

Regarding claim 29, Lovberg discloses the claimed system including a first antenna apparatus (50) (see Figures 3-6) configured to transmit toward and receive from a subject electromagnetic radiation in the range of about 100MHz to about 2 THz (abstract, Figure 3B) from positions spaced from the subject position; generating an image signal representative of the received radiation; a controller adapted to produce from at least a portion of the image signal, image data corresponding to a first image of at least a portion of the subject having a first resolution, and to modify at least a first portion of the first image data in a first manner by blurring a corresponding portion of the first image (paragraph 0038, lines 1-3).

Lovberg does not specify that the blurring is accomplished by reducing the resolution of the image, however it is well known that reducing resolution of an image is one way of blurring, therefore it would have been obvious to use resolution reduction in order to blur a portion of the image.

Regarding claim 30, Lovberg does not specify that the blurring includes reducing the number of different levels of intensity; however, blurring reduces the detail visible in an image, and as one method of blurring, reducing the number of intensity levels would have been obvious in order to hide detail of private areas of the subject.

Regarding claim 33, Lovberg does not specify that the blurring includes reducing the number of different levels of intensity; however, blurring reduces the detail visible in

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an image, and as one method of blurring, reducing the number of intensity levels would have been obvious in order to hide detail of private areas of the subject.

Regarding claim 34, using only two levels of intensity in the blurring of Lovberg would have been obvious in order to further reduce visible detail and to simplify the image processing required.

7. Claims 18-21 and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lovberg as applied to claims 17 and 42 above, and further in view of Keller et al. (2004/0140924).

Regarding claims 18 and 43, Lovberg does not disclose the details of identifying a second portion of the first image data. Keller discloses a related system, program, and method including the claimed correlation of intensity levels between a group of picture elements and an inherent reference group (paragraphs 0008-0009). It would have been obvious to modify Lovberg to include the neural network identification method of Keller as the sophisticated software in order to provide accurate and precise object identification by identifying specific objects.

Regarding claim 19, Lovberg teaches replacing a portion of the first image data with second image data (paragraph 0038, lines 9-11).

Regarding claims 20-21, it is unclear what "replacing at least a second portion of the first image data" refers to (See paragraph 4 of the present Office Action). However, claims 20-21 appear to be drawn to inherent steps of replacing a portion of the first image data as discussed in claim 19.



Regarding claim 44, Keller discloses a related system in which the program is adapted to determine a correlation of the levels of intensity by identifying a portion of the first image data corresponding to which there is at least a threshold correlation of the levels of intensity of the picture elements in at least one group of picture elements with the levels of intensity of the reference group of picture elements (paragraph 0068, lines 12-19). It would have been obvious to include threshold correlation taught by Keller in the invention of Lovberg in order to reduce false alarms (paragraph 0068, lines 17-19).

8. Claims 4-11, 22-23, 31, 35, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lovberg as applied to claims 1, 21, 30, 32 and 37 above, and further in view of McMahon.

Lovberg does not disclose details of the disclosed blurring.

Claims 4-11, 31, 35, 40 describe well-known blurring practices as shown by McMahon. McMahon shows techniques including replacing a portion of first image data with second image data representing picture elements having a new level of intensity derived from the intensity of a plurality of surrounding picture elements depending on relative position to a given element (pages 1-3). The elements have the claimed associating factor (page 2). McMahon also discloses the center picture element may have a factor with value greater than the value of the other factors (page 2). The factors may decrease between the center position and edge positions, may have negative or positive values, and values in columns and rows may alternate between positive and negative values (page 2).

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Regarding claims 22-23, it is unclear what "replacing at least a second portion of the first image data" refers to (See paragraph 4 of the present Office Action). However, the claims appear to be drawn to the same image processing techniques discussed above.

It would have been obvious to use the teachings of McMahon to implement the blurring of Lovberg because these techniques were already known and refined, reducing the amount of time needed to create software.

#### ***Allowable Subject Matter***

9. Claim 28 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited art relates to various imaging systems.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew M. Barker whose telephone number is (571)272-3103. The examiner can normally be reached on M-F, 8:30 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (571)272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*MMB*

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